	nmental Protection Agency on, D.C. 20460					
Water Compliance Inspection Report						
Section A: Natio	nal Data System Coding (i.e	o., PCS)				
Transaction Code NPDES		spection Type	nspector Fac Type			
1 N WAU000364	1 0 0 3 2 9 Remarks		R 3			
21			6			
Inspection Work Days Facility Self-Monitoring Evaluation Rating 70 70 70 70 70 70 70 70 70 70 70 70 70	BI QA 71	7374 75	eserved			
	ection B: Facility Data					
Name and Location of Facility Inspected (For Industrial users discharging to POTW, also include POTW name and NPDES permit number)		Entry Time/Date	Permit Effective Date			
Bloks Evergreen Dairy		2:35 pm 3/29/2010 N/A				
7768 Beebe Road		Exit Time/Date	Permit Expiration Date			
Lynden, WA 98264		4:00 pm 3/29/2010	N/A			
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)		Other Facility Data (e.g.	., SIC NAICS, and other			
Ed Blok, owner/operator		Other Facility Data (e.g., SIC NAICS, and other descriptive information)				
(b) (6) (phone)		SIC 0241				
		unpermitted				
Name, Address of Responsible Official/Title/Phone and Fax Num	her	-				
Ed Blok, owner/operator	Contacted					
7768 Beebe Road	☑ Yes ☐ No	1 ata 14 48 91188				
Lynden, WA 98264 (b) (6) (phone)		Late: N 122.47443				
		- 8				
Section C: Areas Evaluated Du Permit Self-Monitoring I			*			
Permit Self-Monitoring I  Records/Reports Compliance Sch		777.55	*			
Facility Site Review Laboratory Storm Water						
Effluent/Receiving Waters						
Flow Measurement Sludge Handling	/Disposal Sanitary Sew	er Overflow				
	ummary of Findings/Comme		attaches &			
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			U.S. EPA REGION 10			
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Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fa		Date			
Cristin McNeill EPA/OCE (206) 553-6291			4/2/10			
Day Tarables			11-11-			
Dave Terpening	EPA/OCE (206) 553-690	סנ				
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers Date / /		Date / /			
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PA Form 3560-3 (Rev 1-06) Previous editions are obsolete.			1/10			

PCS WALLOW 0364



# NPDES Compliance Inspection Report

Bloks Evergreen Dairy, Inc.

Lynden, Washington

March 29, 2010

Prepared by:
Kristin McNeill
Environmental Scientist
U. S. Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit

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  - C. Length of Animal Confinement
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  - E. Feed Storage Area
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  - G. Waste Management Process
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#### Attachments:

- A. Photograph Documentation
- B. Aerial photo
- C. Washington State Department of Agriculture cover letter regarding 2008 discharge

Unless otherwise noted, all details in this inspection report were obtained from conversations with Ed Blok or from observations during the inspection.

# I. Facility Information

Facility Name:

Bloks Evergreen Dairy, Inc.

Facility Type:

Dairy (SIC 0241)

Facility Contact:

Ed Blok, owner and operator

Facility Address:

7768 Beebe Road Lynden, WA 98264 Whatcom County

Contact Phone Number:

(b) (6)

GPS location:

Lat: N 48.91188 Long: W 122.47443

# II. Inspection Information

Inspection Date:

March 29, 2010

Arrival Time: Departure Time: 2:35 pm 4:00 pm

Weather Conditions:

Cloudy with intermittent rain; approximately 50°

Purpose:

Determination of compliance with the Clean Water Act.

#### III. Permit Information

Bloks Evergreen Dairy does not currently operate under an NPDES permit.

## IV. Owner and Operator Information

This facility is owned and operated by (b) (6) Ed, Dale, and Lee Blok.

#### V. Individuals Present

Inspectors affiliated with the U.S. EPA Office of Compliance and Enforcement were Kristin McNeill and Dave Terpening. Also present was Eric Bair, an inspector with the Washington State Department of Agriculture (WSDA).

Facility representative Ed Blok was present for the inspection. Ed answered our questions and accompanied us throughout the entire inspection.

# VI. Background and Activity

This is a dairy facility that the Blok brothers have been operating for approximately 38 years, since 1972 (photo 1).

The bulk of the waste generated at this facility is in the areas where animals are confined and where feed is stored. This waste includes manure and urine deposited in the confinement areas, wash water from the milking parlor, and runoff from the silage storage area.

Waste handling at this facility consists of three lagoons and a below-ground storage tank. Liquid waste is contained in the lagoons, which were designed by the National Resources Conservation Service (NRCS) and have a total capacity of 6.1 million gallons. The facility also has two off-site lagoons with a total capacity of 3.6 million gallons. The below-ground storage tank has a capacity of 30,000 gallons. Overall, the facility has a waste storage capacity of 9.73 million gallons and approximately 6.5 months of storage.

The inspection of this dairy is part of EPA Region 10's Concentrated Animal Feeding Operation initiative.

#### VII. Inspection Entry

This was an unannounced inspection. Dave Terpening, Eric Bair, and I arrived at the facility at 2:35 pm on March 29, 2010. Dave Terpening and I presented our credentials to Ed Blok and explained the purpose of our visit.

Ed Blok did not deny us access to the facility. We were allowed to inspect all areas that we wished to inspect.

## VIII. Inspection Summary

## A. Chronology

After gaining access to the facility, we began the inspection with a brief opening conference with Ed Blok, in which I explained the purpose of the inspection. Following the opening conference, I proceeded to interview Ed about operations at the facility.

After the interview we proceeded to conduct a walk-through inspection of the facility. We walked the perimeter of the dairy operation and inspected the animal confinement pens, solids separator, silage bunkers, the below-ground storage tank, and the lagoons.

We concluded the inspection with a closing conference with Ed Blok in which we discussed observations and areas of concern identified from the inspection. We left the facility at 4:00 pm on March 29, 2010.

#### B. Number of Animals

At the time of inspection, Ed Blok indicated that they owned approximately 900 milk and dry cows and approximately 600 heifers and calves. According to the dairy's Nutrient Management Plan (NMP), they were approved to have 800 milkers, 125 dry cows, 325 heifers and 325 calves.

C. Length of Animal Confinement

According to Ed Blok, the milkers are confined in pens throughout the year. The heifers are confined as well, except from approximately April to October when they are let out to pasture. The pastures have fences to prevent the cows from accessing any adjacent surface water.

D. Presence of Vegetation in Confinement Areas

At this facility, the milking parlor and the barns where animals are fed and maintained had concrete floors. Based on my observation at the time of inspection, the confinement barns and the milking parlor were devoid of vegetation.

E. Feed Storage Area

The feed was stored in bunkers and was covered with either a tarp or a roof (photo 2).

F. Nutrient Management Plan

The facility has implemented an NMP that was certified by the Whatcom Conservation District. The NMP was certified on December 31, 2003, and is kept at the facility.

G. Waste Management Process

Waste from the barns is scraped into the below-ground storage tank. Sand, which is used as bedding, is also scraped with the waste. To separate the sand from the dairy manure, a screw auger is used to remove the sand while allowing the solid and liquid manure to remain in suspension (photos 3). The sand is then spread out and flushed with wastewater from the barns to remove any remaining solids, after which it is allowed to dry and is re-used for bedding (photo 4). The solids and liquids are routed to a solids separator. The liquids are circulated through the system to keep the solids suspended, and are eventually routed into the lagoons for storage (photo 5).

Some stormwater flows from roof gutters into a nearby ditch; most of it eventually filters into the groundwater. Any stormwater that flows through the feed storage area is collected in a drain that flows into a storage lagoon to prevent runoff of silage leachate (photo 6).

The lagoons are emptied every fall using a pump that is connected to underground pipes, and were most recently emptied in September 2009.

H. Land Application

The Bloks own approximately 385 acres on which they land apply. With an additional 523 acres of leased property, they have approximately 908 acres available for land application of liquid manure. They use a big gun sprinkler and also drag a line behind a tractor and use a splash plate for liquid application.

Land application occurs approximately 5 times per year (after each cutting). The Bloks most recently land applied in February and some in March, 2010.

I. Facility Record Keeping and Inspections

The facility maintains records of land applications and manure test results. The facility also performs periodic inspections to ensure proper operations and maintenance. The lagoons and the solids separator are inspected daily.

J. Receiving Water

The nearest surface water is a drainage ditch that runs through the Blok's property. The Scott ditch and the Nooksack River also border their fields to the north.

#### IX. Areas of Concern

We conducted an interviews with Ed Blok and a walk-through inspection in which we examined the facility, including the confinement areas and waste handling system. At the time of inspection, we did not observe any discharges or areas of concern.

However, during the course of the inspection, Ed Blok indicated that they had a discharge approximately 2 years before this inspection. The Bloks pumped manure onto a field, after which a hard rain occurred, causing manure to run into a roadside ditch. Following a complaint, Jason Pentzer from WSDA notified the Bloks of the discharge. The WSDA cover letter regarding the investigation of this discharge is enclosed as Attachment C.

Report Completion Date:

Lead Inspector Signature:

Kristin McNeill (206) 553-6291

# Attachment A: Photograph Documentation (All photos taken by D. Terpening on March 29, 2010)

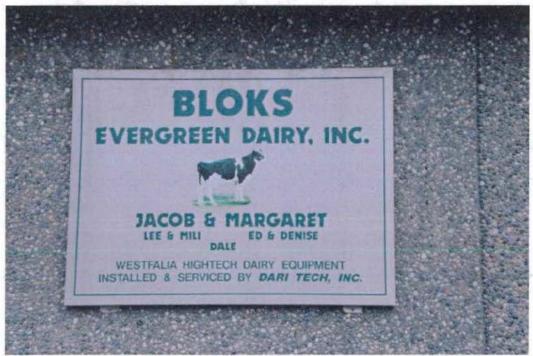


Photo 1. Bloks Evergreen Dairy sign.



Photo 2. Silage storage, covered with a tarp.



Photo 3. Screw auger used to remove sand from solid and liquid manure.

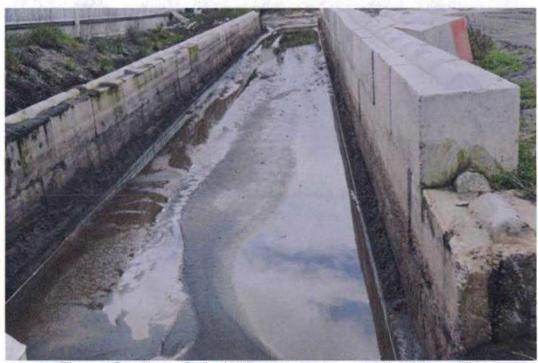


Photo 4. Sand being flushed with water to remove any remaining solids.

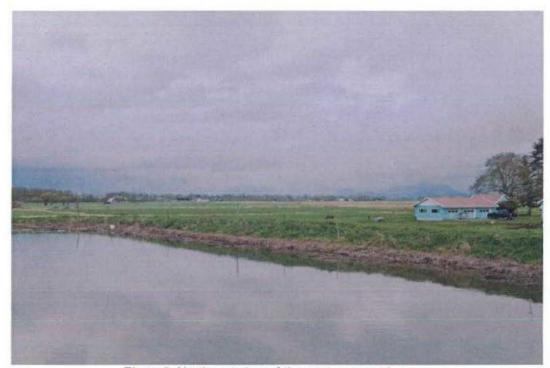


Photo 5. Northeast view of the eastern-most lagoon.

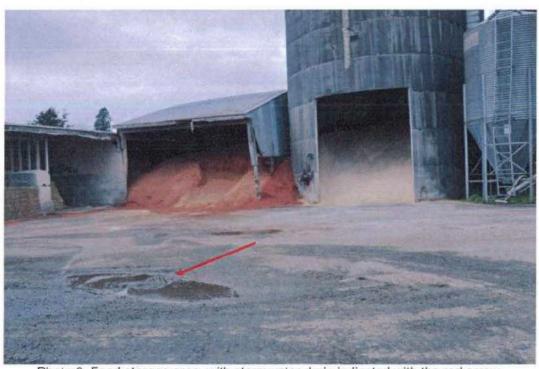
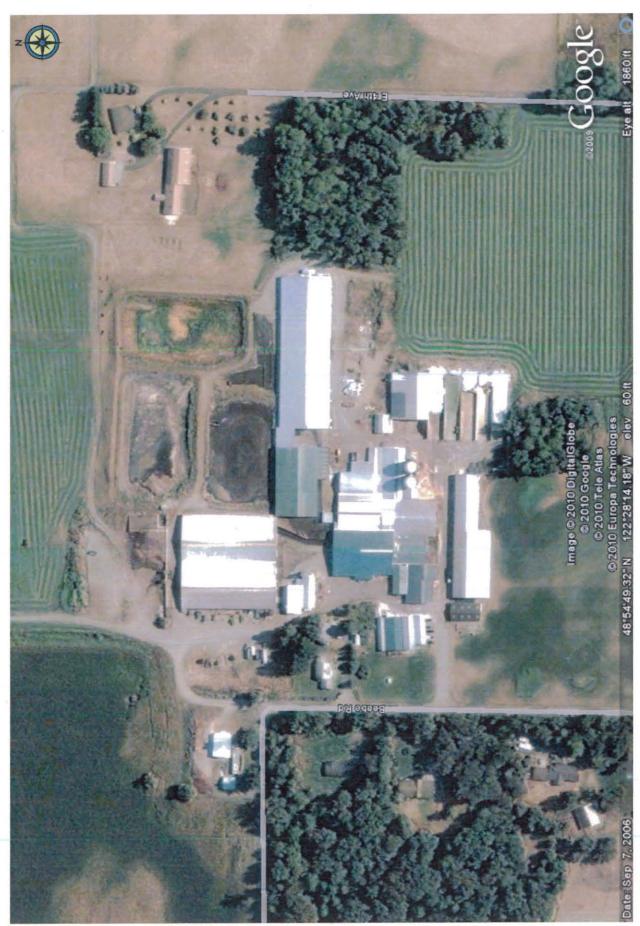


Photo 6. Feed storage area, with stormwater drain indicated with the red arrow.

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Attachment B: Aerial photo (image from Google Earth Pro)

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# ATTACHMENT C:

Washington State Department of Agriculture

Cover Letter Regarding 2008 Discharge

September 17, 2008





#### STATE OF WASHINGTON

# DEPARTMENT OF AGRICULTURE

P.O. Box 42560 · Olympia, Washington 98504-2560 · (360) 902-1800

September 17, 2008

ED LEE AND DALE BLOK BLOKS EVERGREEN DAIRY LLC 7768 BEEBE RD LYNDEN, WA 98264-9407

**RE: Inspection Activity Outcome** 

Dear ED LEE AND DALE BLOK:

On May 28, 2008, Washington State Department of Agriculture (WSDA), Livestock Nutrient Management Inspector Jason Pentzer inspected a manure application made by BLOKS EVERGREEN DAIRY LLC to the grass field located north of the dairy and south of LLPL Ditch. You will find copies of the inspection reports, field notes, water sample results, and photos related to that investigation enclosed.

The investigation began on May 27, 2008, when I received a complaint about discolored water in LLPL Ditch at Guide Meridian Rd. This particular field was inspected because the dairy had applied manure there about two weeks before the complaint. During the investigation, I found that:

- The dairy was implementing the requirements for application dates and setbacks in its Nutrient Management Plan (NMP).
- Fecal coliform levels were not exceeding the state Water Quality Criteria when I collected samples on May 28, 2008.
- I observed other evidence that manure and floodwaters had interacted.

#### More specifically, I found that:

- During the two weeks between the application and the complaint, the Nooksack River reached an
  unusually high level for the month of May. May 18, 2008, with 15,300 cfs in the Nooksack River
  at Ferndale appears to have been a record, the highest recorded for the river in the month of May
  since they started keeping records in 1967.
- The NMP for this dairy suggests liquid manure applications in this field from March to July, with applications only specifically prohibited from October 1st to February 15th. The dairy was well within this application window.
- The dairy used a setback and filter strip wider than what was required by its NMP when it made this application. The NMP describes application setbacks from LLPL Ditch in the field as follows:
  - At least 35 ft (all types of manure including solids) from September 1st to April 15th.
  - At least 10 ft if using tanker, injector, or spreader from April 15th to September 1st.

Phone: (360) 961-7412

Email: JPentzer@agr.wa.gov

- At least 35 ft if using big gun no matter what time of year
- Water samples collected from LLPL Ditch upstream and downstream of the field on May 28, 2008, met the state Water Quality Criteria for fecal coliform bacteria (sample results enclosed).

- In one spot about 60 ft south of LLPL Ditch and 45 ft south of a small pond connected to LLPL Ditch, I found evidence that a small part of the recent manure application area had been covered by flood waters (photos and field notes enclosed).
- I inspected the rest of the field perimeter where it borders LLPL Ditch and did not see clear
  evidence the flooding and recent manure application had overlapped in any other spots.

I appreciate that some of your low lying fields are a challenge to manage. The more infrequent you can make floodwater-manure interactions by using your own initiative and best judgment, the better case you will have that these interactions are being managed best by the dairy and don't require more attention from regulators.

This investigation is now closed. If you have any concerns after reviewing the investigation materials please contact me at (360) 961-7412.

Phone: (360) 961-7412

Email: JPentzer@agr.wa.gov

Sincerely,

Jason Pentzer

Livestock Nutrient Management Program

cc: Chris Clark, Whatcom Conservation District

Enclosures:

5/28/08 Inspection Report 3 pgs 5/27/08 and 5/28/08 investigation notes 4 pgs 5/29/08 Investigation notes 1 pg 6/12/08 Investigation notes 1 pg 6/18/08 Historic flow data 1 pg 5/28/08 Water sample results 2 pgs

5/28/08 photos 2 pgs